DOCKET NO.: MSFT-2835/306097.01
Application No.: 10/722,987
Office Action Dated: December 13, 2007

**PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.   (Previously presented) A method for searching data in an electronic device comprising:

storing a plurality of first character strings and corresponding second character strings;

receiving a query; and

searching the stored character strings responsive to the query by receiving a character, appending said character to previously received characters if any, performing a prefix search of received characters on the stored second character strings, and returning a set of first character strings stored with the second character strings that match the prefix search, wherein receiving the character comprises receiving input from an input device, and determining the character from a set of characters that corresponds to the received input, further wherein the input device comprises a keypad having at least one alphanumeric key associated with a unique number and a unique subset of an alphabet.

2.   (Original) The method of claim 1, further comprising receiving one of the first character strings, and generating the corresponding second character string.

3.   (Original) The method of claim 2, wherein the receiving the first character string comprises:

(A) receiving an input character;

(B) appending said input character to previously received input characters if any;

(C) repeating steps (A) and (B) for each additional character received.

4.   (Original) The method of claim 2, wherein generating the second character string comprises:

mapping a first set of characters to a second set of characters; and

building the second character string from the second set of characters using the mapping and the first character string.

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5.   (Previously Presented) The method of claim 4, wherein each of the characters in the second set of characters is a number associated with a corresponding alphanumeric key on the keypad of the input device, and each of the characters in the first set of characters corresponds to a letter of the alphabet.

6.   (Original) The method of claim 4, further comprising storing the mapping as a table.

7.   (Original) The method of claim 6, wherein the storing as a table comprises:

        storing each of the characters in the second set of characters in a respective row in a first column of the table; and

        storing an associated subset of characters of the first set of characters in a respective row in a second column of the table.

8-9.   (Cancelled)

10.   (Original) The method of claim 1, further comprising repeating the steps of appending, performing a prefix search, and returning the set, in response to receiving a further character.

11.   (Original) The method of claim 1, wherein returning the set of first character strings comprises displaying the set of first character strings corresponding to the second character strings that match the prefix search on a display device.

12.   (Original) The method of claim 11, further comprising:

        receiving a first character string selection of the set of first character strings shown on the display device; and

        displaying the set of character strings stored with the first character string selection on a display device.

13-24. (Cancelled)

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25.   (Currently amended) A data searching system, comprising:

an input device for receiving a query through a limited input keypad;

a storage device for storing a plurality of first character strings and corresponding second character strings; wherein each of the second character strings is a number associated with a corresponding alphanumeric key on the keypad of the input device, and each of the first character strings corresponds to a unique subset of an alphabet associated with the corresponding alphanumeric key;

~~an input device for receiving a query;~~

a display device for displaying a set of character strings; and

a processor for searching the stored character strings responsive to the query by receiving a character, appending said character to previously received characters if any, performing a prefix search of received characters on the stored second character strings, and providing to the display a set of character strings stored with the second character strings that match the prefix search~~, wherein the input device comprises a keypad having at least one alphanumeric key associated with a unique number and a unique subset of an alphabet~~.

26.   (Original) The system of claim 25, wherein the processor receives the first character strings from the input device, and generates the second character strings corresponding to the first character strings.

27.   (Original) The system of claim 26, wherein the processor is adapted to receive the first character string by (A) receiving an input character; (B) appending said input character to previously received input characters if any; and (C) repeating steps (A) and (B) for each additional character received.

28.   (Original) The system of claim 26, wherein the processor generates the second character strings by mapping a first set of characters to a second set of characters, and building the second character string from the second set of characters using the mapping and the first character string.

29.   (Cancelled)

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30.   (Original) The system of claim 28, wherein the storage device comprises a table for storing the mapping.

31.   (Original) The system of claim 30, wherein the table comprises:

a respective row in a first column of the table for storing each of the characters in the second set of characters; and

a respective row in a second column of the table for storing an associated subset of characters of the first set of characters.

32.   (Original) The system of claim 25, wherein the processor determines the character from a set of characters that corresponds to the received input.

33.   (Cancelled)

34.   (Original) The system of claim 25, wherein the processor repeats the steps of appending, performing a prefix search, and returning the set, in response to receiving a further character.

35.   (Original) The system of claim 25, wherein the display device displays the set of first character strings corresponding to the second character strings that match the prefix search.

36.   (Original) The system of claim 35, wherein the input device receives a first character string selection of the set of first character strings shown on the display device, and the display device displays the set of character strings stored with the first character string selection.

37.   (New) A method of recognizing a string of alphabets entered into a limited input keypad, the limited input keypad comprising at least one alphanumeric key that combinedly represents a number and a plurality of alphabets, the method comprising:

populating a lookup table by mapping the string of alphabets to a string of numbers, the mapping comprising:

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identifying depression of a first alphanumeric key on the keypad, wherein the first alphanumeric key is selected to correspond to a first alphabet in the string of alphabets;

storing a first number associated with the first alphanumeric key;

identifying depression of a second alphanumeric key on the keypad, wherein the second alphanumeric key is selected to correspond to a second alphabet in the string of alphabets; and

storing a second number associated with the second alphanumeric key, wherein the second number is stored along with the first number, and wherein the combination of the first and second numbers comprises the string of numbers that corresponds to the string of alphabets.

38.   (New) The method of claim 37, further comprising:

completing the mapping by storing each of the numbers corresponding to each of the alphabets in the string of alphabets; and

using the lookup table for recognizing a subsequent entry of the string of alphabets into the limited input keypad, the recognizing comprising:

identifying subsequent depression of the first alphanumeric key on the keypad;

searching the lookup table to locate the first number associated with the first alphanumeric key;

identifying subsequent depression of the second alphanumeric key on the keypad;

searching the lookup table to locate the second number associated with the second alphanumeric key; and

recognizing from the combination of first and second numbers, the combination of the first and second alphabets that comprise the string of alphabets.

39.   (New) The method of claim 38, further comprising:

displaying the combination of the first and second alphabets to indicate the presence of a potential match in the lookup table.

40.   (New) The method of claim 39, further comprising:

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displaying all alphabets in the string of alphabets upon recognizing an exact match in the string of numbers contained in the lookup table.

41. (New) The method of claim 38, further comprising:

populating the lookup table by mapping a plurality of additional alphabet strings to a corresponding plurality of additional number strings.

42. (New) The method of claim 41, further comprising:

displaying at least one alphabet from one of the additional alphabet strings as a potential match during the subsequent entry of the string of alphabets into the limited input keypad.

43. (New) The method of claim 41, further comprising:

displaying duplicate matches that exist in the lookup table.